PATENT Atty Dkt. No. 017750-606

ABSTRACT OF THE DISCLOSURE

A via on a printed circuit board having a circuit has a first interconnect and a second interconnect located about at least a portion of the first interconnect. The second interconnect connects to ground of the circuit and is coaxial and substantially concentric with the first interconnect and inductively coupled with the first interconnect. A method of electrically interconnecting at a via multiple layers on a printed circuit board to provide a common ground plane for a circuit is also provided. A high speed interconnection can be attained by allowing the ground return path for a circuit carried on multiple layers of a multilayer printed circuit board to remain coupled to the signal, thereby lowering ground inductance and maintaining signal integrity, even at UHF, while minimizing costs.